

REMARKS

Receipt of the final rejection mailed December 17, 2003 is acknowledged. Claims 1-4 and 6-18 have been rejected as being obvious over Delio in view of Gebauer. Claim 5 has been rejected as being obvious over Delio in view of Gebauer and further in view of Kato. Claim 19 has been rejected as being obvious over Delio in view of Gebauer and further in view of Mochizuki. In keeping with the foregoing amendments and the following argument, reconsideration is respectfully requested.

The rejection of independent claim 1 as being obvious over Delio in view of Gebauer is fatally flawed and must be withdrawn. Claim 1 positively recites, in part, measuring a position of the moving machine part directly on the machine part and also indirectly at a location in the transmission chain. Simply put, the invention of claim 1 measures two actual positions: 1) the position of the machine part; and 2) the position of one or more elements of the transmission elements to the machine part. There can be no dispute that the claim positively recites:

- a) measuring a position of the moving machine part directly on the machine part and also indirectly at at least one location in a transmission chain;

These two positions can then be compared and used to record a disturbance.

By comparison, Delio takes only a direct measurement in the vicinity of the machine tool, using two microphones 54 and 56 to detect vibration and/or sounds or, alternatively, a pair of "displacement sensors" or the like. See Col. 5, lines 37-39, and 60-66, as well as Fig. 1. Although Delio also uses a speed pickup sensor 14, this sensor 14 is simply a rotational sensor that senses the speed of the rotating spindle 16. The sensor 14 does not and cannot give any indication whatsoever of the location of the part or of the location of any component in the transmission elements to the machine part. There is no way to "compare" a position

detected by displacement sensors to a rotational speed. Moreover, there would be no suggestion to change the rotational sensor to any other type of sensor, as the whole point of the Delio reference is to keep rotational speed within a desired range to avoid chatter. See, for example, lines 1-8 of the Abstract. Further, one would not add another positional sensor to Delio, because another positional sensor would not give information relative to rotationally-induced chatter, and there would be no suggestion to add such a positional sensor without using applicants' disclosure as a template. Consequently, there can be no *prima facie* case of obviousness based even in part on Delio.

Gebauer adds nothing of relevance. Gebauer merely measures a position of the machine part, and compares the measured position with an expected position that has been previously stored. See Col. 2, lines 15-20, and Col. 3, lines 14-20. Motion is inhibited if there is a difference between the measured position and the previously stored expected position. There simply is no direct measurement of the part in conjunction with an indirect measurement taken along the transmission element. There would be no suggestion to modify Gebauer to reach the claimed invention, as the needed modification(s) would render the stored data aspect of the reference entirely superfluous. There can be no *prima facie* case of obviousness based even in part on Gebauer.

The cited combination fails to teach or even suggest claim limitations, and therefore there cannot be a *prima facie* case of obviousness. Further, Delio and Gebauer both teach away from the claimed invention, and there would be no suggestion to modify either reference. Accordingly, the rejection must be withdrawn, and claim 1 is in allowable form.

Claims 2-11 depend from claim 1. Accordingly, claims 2-11 are also in allowable form.

For the reasons discussed above with respect to claim 1, the cited combination also fails to teach or even suggest the limitations of claim 12. Accordingly, the rejection of claim 12 must be withdrawn and claim 12 is in allowable form.

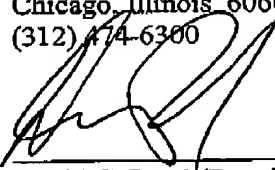
Claims 13-19 depend from claim 12. Accordingly, claims 13-19 are also in allowable form.

In view of the foregoing the above-identified application is in condition for allowance. In the event there is any remaining issue that the Examiner believes can be resolved by a telephone conference, the Examiner is respectfully invited to contact the undersigned attorney at (312) 474-6612.

Respectfully submitted,

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